

"Echo" Interior Self Amplified Speaker **ELK-870**

APPLICATION

The ELK-870 is a self amplified interior speaker which may be connected to virtually any audio source, ie: microphone, radio, computer sound card, telephone PBX or KEY system paging output, etc., even an ordinary single line phone set. The audio source is amplified up to 10 watts, adjustable from an on-board volume control. The ELK-870 features a reverse mounted, high quality internal speaker that effectively echos the sound off the surrounding mounting surface. This arrangement enriches the low frequency ranges and reduces the undesirable high "tinny" frequencies. The attractive "no-grille" surface of the ELK-870 may be painted or wallpapered to match the surrounding decor. It is wall or ceiling mountable. For additional coverage, up to three (3) external 8 Ohm speakers may be wired in parallel with the internal speaker. The ELK-870 operates on 12 to 24 Volts A.C. or D.C. and requires only 22-24 gauge telco or alarm type wire.

FEATURES:

- Self-Contained 10 Watt Amplified Speaker.
- Amplifies Virtually Any Audio Source.
- Expanded Telephone System Paging.
- Does Not Require 25 or 70V Line Transformers.
- Attractive "No-Grille" Surface Mount Enclosure.
- May be Painted or Wallpapered .
- Drives Up to Three (3) Additional 8 Ohm Speakers.
- Built-in Volume Control & Gain Select.
- Electrical "J" Box Mounting Holes.
- Mounting Hardware Included.

SPECIFICATIONS:

- Operating Voltage: 12 to 24V A.C. or D.C.
- Input Impedance: 1000 Ohms Nominal.
- Audio Input Level: -15 dBm to +10 dBm.
- Rated Output: 10 Watts.
- Output Speaker Load: 2 to 16 Ohms.
- Current Draw: 38 - 800 mA Depending on Load and Volume Settings.
- Temperature: 0 to 130°F.
- Humidity: 0 to 95% Non-Precipitating.
- Lifetime Limited Warranty.
- Patent Pending.

Features and Specifications subject to change without notice.

ELK
PRODUCTS, INC.

INSTALLATION for ELK-870

1. Remove the front cover by inserting and twisting the tip of a wide flat-blade screwdriver in the slots along the edge of the housing.
2. Mounting holes are provided on the backplate for a standard electrical J-box as well as for direct surface mounting (hardware included).
3. Connect all wiring as follows. Recommended wire gauge is 22-24 AWG. If distance exceeds 1000' use 18-20 gauge.

PWR IN: Connect a good quality 12 to 24 Volt A.C. or D.C. power source. No polarity need be observed.

AUDIO IN: Connect an audio input source. ie: microphone, radio, computer sound card, telephone PBX or KEY system paging output, etc., even an ordinary single line phone set (see diagram below). With Jumper JP1 set in the NO PREAMP position the ELK-870 is setup for an audio signal of -15 dbm to + 10 dbm. This jumper may be placed in the PREAMP position to provide +18dbm addition gain for weak audio input signals

SPKR: Internal speaker already connected. The ELK-870 speaker output can handle up to a maximum load of two (2) Ohms. Up to three (3) additional 8 Ohm speakers (MIN = 20 Watt (ELK-70, ELK-14, ELK-1...) may be connected in parallel on these two terminals.

Recommended ELK-870 Spacing For Background Paging Applications

Ambient Sound Level	Location	Speaker Spacing
Quiet 50 to 65db	Offices	120 feet (14,400 sq. feet)
Moderate 65 to 80db	Light manufacturing	90 feet (8,100 sq. feet)
Noisy 80 to 90db	Heavy manufacturing	60 feet (3,600 sq. feet)
Very Noisy +90cb		40 feet (1,600 sq. feet)

VOLUME: Turn the volume control clockwise (CW) to increase volume. Adjust to a comfortable level.

PREAMP: If the audio input signal is too low for proper amplification, place Jumper JP1 into the PREAMP position for an additional audio input gain of +18 dbm (8 X gain).

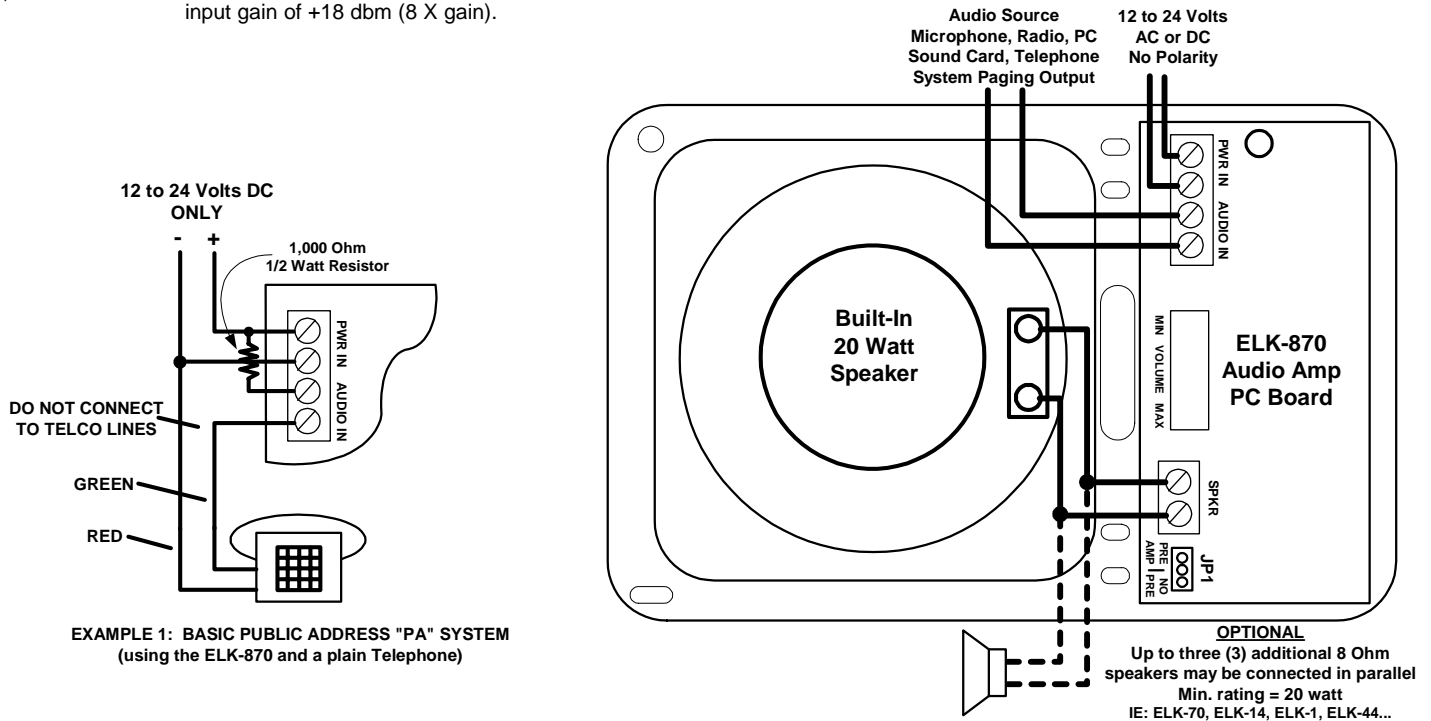


FIGURE 1: WIRING HOOKUP

LIFETIME LIMITED WARRANTY

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